

**USE OF LEPTIN FOR TREATING HUMAN LIPOATROPHY AND METHOD OF  
DETERMINING PREDISPOSITION TO SAID TREATMENT****ABSTRACT**

Leptin, leptin analogs, and leptin derivatives are used to treat patients with lipoatrophy. Leptin is effective against conditions of lipoatrophy for both genetic and acquired forms of the disease. A therapeutically effective amount of leptin can be administered in a variety of ways, including subcutaneously and using gene therapy methods. Methods of the present invention contemplate administration of leptin, leptin analogs, and leptin derivatives to patients having a leptin level of approximately 4 ng/ml or less before treatment.